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EXAMINER
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THOMPSON, JAMES A

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2624

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/814,845

Applicant(s)

HART ET AL.

Examiner

James A. Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 1/26/06, 12/27/05, 11/14/05 and 10/31/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 and 57-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/26/06, 10/31/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Arguments***

1. With respect to page 30, line 10 to page 31, line 13 of Applicant's arguments, filed 14 November 2005, the amendments to the specification are deficient. Under USPTO practice, amendments to the Specification require listing the page and line numbers that are to be replaced, deleted or amended.

2. With respect to page 31, line 15 to page 32, line 14 of Applicant's present arguments, the drawings filed 14 November 2005 have been accepted.

3. With respect to page 32, lines 16-23 of Applicant's present arguments, the amendments to the claims are accepted as containing no new matter.

4. Applicant's arguments filed 14 November 2005 have been fully considered but they are not persuasive.

**Regarding page 33, line 11 to page 33, line 13:**

***Applicant argues*** that Sugiyama (US Patent 5,633,723) and Jacobs (US Patent 5,386,510) are non-analogous art since Jacobs deals only with print media.

***Examiner replies*** that Jacobs is concerned with the processing of bitmaps which are received by the overall apparatus (see figure 1(27); column 2, lines 58-68; and column 3, lines 3-14 of Jacobs). Bitmap image data is a type of multi-media data. Multi-media data does not have to be time-based, nor has Examiner suggested that Jacobs teaches time-based media data. Both Sugiyama and Jacobs are concerned with the control

and processing of multi-media data, as is the present application. Thus, Sugiyama and Jacobs are clearly within the same field of endeavor.

***Applicant argues*** that there is no motivation to combine Sugiyama and Jacobs since allegedly they are addressed to different problems.

***Examiner replies*** that, as demonstrated above, Sugiyama and Jacobs are clearly within the same field of endeavor. Furthermore, a clear motivation to combine the teachings of Jacobs with the teachings of Sugiyama is clearly set forth in Jacobs. As stated on page 4, lines 15-18 of the previous office action, dated 05 August 2005 and mailed 09 August 2005, the parallel processing taught by Jacobs increases the overall speed with which media data can be processed (column 2, lines 33-41 of Jacobs). Thus, one of ordinary skill in the art at the time of the invention would clearly have been motivated to combine Jacobs with Sugiyama to obtain the recited claims 1 and 57.

**Regarding page 34, line 14 to page 35, line 18:**

***Applicant argues*** that all of the limitations of claim 57 are not taught by Sugiyama and Jacobs since allegedly the parallel processors are internal to the media processing system.

***Examiner replies*** that the parallel processors taught by Jacobs are clearly external to each other. Each parallel processor has its own input and output lines and external memory interface (see figure 3 of Jacobs). The central computer (figure 1(10) of Jacobs) is itself a microcomputer (column 3, lines 5-7 of Jacobs) and is connected to a plurality of separate parallel processors (figure 1(11,12,13) of Jacobs) through a communication channel (figure 1(20) of Jacobs) (see column 3,

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lines 3-11 of Jacobs, as cited in said previous office action). Thus, it is clear that the parallel processors are external with respect to each other and with respect to the central unit.

By combination with Sugiyama, the first parallel processor taught by Jacobs is the media processing system taught by Sugiyama and the second parallel processor taught by Jacobs is a media processing system that is external. The fact that the two parallel processors are external to each other provides, by combination with Sugiyama, that the overall media processing system resides at least in part on an external media processing system, since the media processing system (first parallel processor in Jacobs) is external to the other media processing system (second parallel processor in Jacobs). This combination has been clearly set forth on page 4, lines 5-15 of said previous office action.

**Regarding page 35, line 19 to page 36, line 17:**

***Applicant argues*** that Jacobs does not support a housing for supporting an interface since allegedly the parallel processors are all internal to the system, and thus any housing would cover the entirety of figure 1 of Jacobs, except the external bus.

***Examiner responds*** that, as discussed above, the parallel processors (figure 1(11,12,13) of Jacobs) and the central unit (figure 1(10) of Jacobs) are clearly external to each other. Each parallel processor has its own input and output lines and external memory interface (see figure 3 of Jacobs). The central computer (figure 1(10) of Jacobs) is itself a microcomputer (column 3, lines 5-7 of Jacobs) and is connected to a plurality of separate parallel processors (figure 1(11,12,13) of Jacobs) through a communication channel (figure 1(20) of Jacobs) (see

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column 3, lines 3-11 of Jacobs, as cited in said previous office action).

Thus, each processor has its own housing since each processor is external with respect to each other and each processor must inherently have some form of physical construction in order to exist and function.

***Applicant argues*** that Jacobs does not teach time-based media data.

***Examiner replies*** that Sugiyama has been relied upon to teach time-based media data, as clearly set forth on page 2 of said previous office action. Jacobs specifically teaches the control and processing of media data. By attempting to require that Jacobs also teach time-based media data, Applicant is ignoring the combination of references. Applicant is respectfully reminded that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

**Regarding page 36, line 18 to page 37, line 19:**

***Applicant argues*** that the central unit taught by Jacobs is allegedly not the claimed resource allocation unit nor does it determine processing allocation, since said central unit allegedly does not communicate directly with the parallel processors, but only indirectly through the communication channel, which first passes through all of the remaining parallel processors.

***Examiner replies*** that figure 1 of Jacobs in no way demonstrates that said central unit communicates indirectly

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through the communication channel, which first passes through all of the remaining parallel processors. Each parallel processor is simply connected to the same communication channel, as is the central unit. As can clearly be seen in figure 2 of Jacobs, which shows the individual parallel processors in greater detail (column 2, line 50 of Jacobs), each parallel processor has a communication unit (figure 2(21) of Jacobs) which connects the parallel processor to the communication channel (column 3, lines 24-27 of Jacobs). The arithmetic logic unit (figure 2(24) of Jacobs) is present in each one of the parallel processors (see figure 1 of Jacobs) and communicates to the central unit via a communication unit (column 4, lines 1-4 of Jacobs). Since the central unit contains all of the bitmap image data to be processed (column 3, lines 3-8 of Jacobs), and each parallel processor receives its respective portion of the bitmap image data (column 3, lines 28-40 of Jacobs) so as to best distribute the workload (column 4, lines 15-18 and lines 22-26 of Jacobs), then clearly the central unit determines the processing allocation.

**Regarding page 37, line 20 to page 38, line 16:**

***Applicant argues*** that neither Sugiyama nor Jacobs have a user interface to allow a user to select among available resources.

***Examiner replies*** that Applicant is attempting a piecemeal analysis of the references instead of addressing the combination of references as clearly set forth in said previous office action. Sugiyama teaches a user interface (figure 1(21-25) of Sugiyama) for receiving user input indicating selection of one or more media processing resources (column 3, lines 41-50 of

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Sugiyama). The collection of input keys (figure 1(21-25) of Sugiyama) provides user inputs through the input keys (column 3, lines 41-50 of Sugiyama) and thus forms the overall user interface. While every detail of the recited user interface of claim 1 is not fully taught by Sugiyama, the recited user interface is fully taught by the *combination* of Sugiyama and Jacobs. Since Jacobs teaches a second media processing system (figure 1(12) of Jacobs) that is external to a first media processing system (figure 1(11) of Jacobs) (column 3, lines 3-11 of Jacobs), and selecting among resources of the first and second processors (column 4, lines 1-9 of Jacobs), by *combination*, Sugiyama and Jacobs fully teaches the user interface recited in claim 1, since the precise selection performed is therefore among resources of the printer and the external system [see also page 4, lines 5-15 of said previous office action]. Again, Applicant is respectfully reminded that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

**Regarding page 38, line 17 to page 39, line 5:**

As claims 1 and 57 have been demonstrated to indeed be taught by the combination of Sugiyama and Jacobs, the dependent claims have been full rejected over the prior art, and Applicant does not specifically address the prior art rejections of the dependent claims, all of the present claims are considered rejected over the prior art. Some amendments have been made to some of the dependent claims. These amendments are fully



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addressed in the prior art rejections below. Any new grounds of rejection given below have been necessitated by the present amendments to the claims.

***Specification***

5. The disclosure is objected to because of the following informalities: The presently presented amendments to the specification make references to paragraph numbers. As per USPTO practice, Applicant needs to specifically list the page and line numbers where text is to be amended, added or deleted from the specification.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4-5, 11, 17, 19, 34-37 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Jacobs (US Patent 5,386,510).

**Regarding claim 1:** Sugiyama discloses a media processing system (figure 1 of Sugiyama) for determining an electronic representation (column 6, lines 19-26 of Sugiyama) of time-based media (column 3, lines 12-17 of Sugiyama) wherein the media processing system resides at least in part on a multi-media

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printer (figure 1 and column 3, lines 11-13 of Sugiyama); the multi-media printer including a housing (the overall physical construction of the system of figure 1 of Sugiyama) for supporting an electronic output system (figure 1(18-20) of Sugiyama) in communication with the media processing system to receive the electronic representation (column 3, lines 31-35 of Sugiyama), the electronic output system producing a corresponding electronic output from the electronic representation of the time-based media (column 3, lines 31-35 of Sugiyama); and a user interface (figure 1(21-25) of Sugiyama) for receiving user input indicating selection of one or more media processing resources (column 3, lines 41-50 of Sugiyama). The collection of input keys (figure 1(21-25) of Sugiyama) provides user inputs through the input keys (column 3, lines 41-50 of Sugiyama) and thus forms the overall user interface.

Sugiyama does not disclose expressly that said media processing system resides at least in part on an external media processing system; that said housing supports an interface for transferring said time-based media data between the external media processing system and the printer; a resource allocation module for determining processing allocation for at least one task among the printer and the external media processing system; and that said media processing resources selected via said user interface are selected from among resources of the printer and an external system.

Jacobs discloses a media processing system (figure 1 of Jacobs) which resides at least in part on a second media processing system (figure 1(12) of Jacobs) that is external to a first media processing system (figure 1(11) of Jacobs) (column 3, lines 3-11 of Jacobs); a housing (the overall physical

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construction of the system of figure 1 of Jacobs) for supporting an interface (figure 1(21) of Jacobs) for transferring media data between the external (second) media processing system and the first media processing system (column 3, lines 7-11 of Jacobs); a resource allocation module (figure 1(10) and column 3, lines 5-11 of Jacobs) for determining processing allocation for at least one task (column 4, lines 1-10 of Jacobs) among the first media processing system and the external (second) media processing system (column 3, lines 12-14 and column 4, lines 15-21 of Jacobs); and selecting among resources of the first and second processors (column 4, lines 1-9 of Jacobs).

Sugiyama and Jacobs are combinable because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform the media processing in parallel on two separate processors, with a unit for controlling precisely how the processing is allocated among the two processors, as taught by Jacobs, the first processor being the multi-media printer taught by Sugiyama and the second processor being an external media processing system, as taught by Jacobs. Further, by performing media processing using parallel processing, selection among the resources of the multi-media printer and the external media processing system can be performed. The motivation for doing so would have been that parallel processing increases the overall speed with which media data can be processed (column 2, lines 33-41 of Jacobs). Therefore, it would have been obvious to combine Jacobs with Sugiyama to obtain the invention as specified in claim 1.

**Further regarding claim 4:** Jacobs discloses that said external media processing system is a remote external service system coupled via a network (column 4, lines 49-56 of Jacobs) to the interface (figure 1(10) and column 3, lines 5-8 of Jacobs) for transferring time-based media (column 3, lines 5-14 of Jacobs), the external service system in communication with the media processing system for performing at least some processing steps for the time-based media (column 4, lines 4-10 of Jacobs).

**Regarding claim 5:** Sugiyama discloses that the user interface (figure 1(21-25) of Sugiyama) is a part of the printer (column 3, lines 39-44 of Sugiyama).

**Regarding claim 11:** Sugiyama discloses that the interface comprises a communication interface (figure 1(11) of Sugiyama) allowing the system to be communicatively coupled to an electronic device, the electronic device providing the time-based media to the system (column 3, lines 12-17 of Sugiyama).

**Regarding claim 17:** Sugiyama discloses that said interface comprises embedded screen capture hardware (figure 1(12) and column 3, lines 12-16 and lines 20-24 of Sugiyama).

**Regarding claim 19:** Sugiyama discloses that said interface comprises an embedded video recorder (figure 1(11) of Sugiyama), wherein the time-based media (figure 1("Video Signal") of Sugiyama) is a series of images captured by the embedded video recorder, converted into an electronic format (column 3, lines 12-17 of Sugiyama), and then provided to the media processing system (column 3, lines 16-20 of Sugiyama).

**Regarding claim 34:** Sugiyama discloses that said media processing system determines a printed representation of the time-based media data (column 5, line 66 to column 6, line 5 of

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Sugiyama); and the system further comprises a printed output system (figure 1(31-33) of Sugiyama) in communication with the media processing system (column 5, line 63 to column 6, line 2 of Sugiyama) to receive the printed representation (column 5, line 66 to column 6, line 5 of Sugiyama), the printed output system producing a corresponding printed output from the printed representation of the time-based data (column 6, lines 2-5 of Sugiyama).

**Regarding claim 35:** Sugiyama discloses that said printed output system is one of the group of a laser printer, an inkjet printer, a thermal wax transfer printer, a dye sublimation printer, a dot matrix printer, and a plotter (column 7, lines 48-53 of Sugiyama).

**Regarding claim 36:** Sugiyama discloses that said user interface provides information to a user about at least one of the printed representation and the electronic representation of the time-based media (column 3, lines 45-48 of Sugiyama), said user interface further accepting input from a user to cause said media processing system to modify at least one of the printed representation and the electronic representation of the time-based media (column 3, lines 57-61 of Sugiyama).

**Regarding claim 37:** Sugiyama does not disclose expressly that said media processing system determines at least one of said printed representation and said electronic representation with assistance from an external media processing system that is an external computing device.

Jacobs discloses an external media processing system (figure 1(13) of Jacobs) that is an external computing device (column 3, lines 5-11 of Jacobs) which provides assistance in

determining at least one of a printed representation and an electronic representation (column 5, lines 1-10 of Jacobs).

Sugiyama and Jacobs are combinable because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the external computing device to assist in determining at least one of a printed representation and an electronic representation, as taught by Jacobs. The motivation for doing so would have been to increase the overall speed with which media data can be processed (column 2, lines 33-41 of Jacobs). Therefore, it would have been obvious to combine Jacobs with Sugiyama to obtain the invention as specified in claim 37.

**Regarding claim 57:** Sugiyama discloses receiving user input indicating selection of one or more media processing resources (column 3, lines 41-50 of Sugiyama); and determining the electronic representation (column 6, lines 19-26 of Sugiyama) of the time-based media using the determined resources (column 3, lines 12-17 of Sugiyama).

Sugiyama does not disclose expressly that said resources indicated by said user input are from among resources of the printer and an external media processing system; determining processing allocation for at least one task among the printer and the external media processing system; and that said determined resources, used to determine the electronic representation of the time-based media data, are specifically the determined *allocation* of resources.

Jacobs discloses a second media processing system (figure 1 (12) of Jacobs) that is external to a first media processing system (figure 1(11) of Jacobs) (column 3, lines 3-11 of

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Jacobs), wherein both said first media processing system and said second media processing system process media data in parallel (column 4, lines 22-28 of Jacobs); selecting among resources of the first and second media processing systems (column 4, lines 1-9 of Jacobs); and determining processing allocation for at least one task (column 4, lines 1-10 of Jacobs) among the first media processing system and the external (second) media processing system (column 3, lines 12-14 and column 4, lines 15-21 of Jacobs).

Sugiyama and Jacobs are combinable because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform the media processing in parallel on two separate processors, with a unit for controlling precisely how the processing resources are allocated among the two processors, as taught by Jacobs, the first processor being the multi-media printer taught by Sugiyama and the second processor being an external media processing system, as taught by Jacobs. Further, by performing media processing using parallel processing, selection among the resources of the multi-media printer and the external media processing system can be performed. The motivation for doing so would have been that parallel processing increases the overall speed with which media data can be processed (column 2, lines 33-41 of Jacobs). Therefore, it would have been obvious to combine Jacobs with Sugiyama to obtain the invention as specified in claim 57.

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8. Claims 2 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Jacobs (US Patent 5,386,510) and Gropp (*Using MPI - Portable Parallel Programming with the Message-Passing Interface, second edition*).

**Regarding claims 2 and 58:** Sugiyama in view of Jacobs does not disclose expressly that said resource allocation module determines whether said printer resource interacts as a master or as a slave with said external media processing system.

Gropp discloses determining whether different processors interact as master or slave processors (page 35, last five lines).

Sugiyama in view of Jacobs is combinable with Gropp because they are from similar problem solving areas, namely the control of resource allocation in parallel processing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to control whether said printer resource, taught by Sugiyama in view of Jacobs, interacts as a master or as a slave, as taught by Gropp, with said external media processing system taught by Sugiyama in view of Jacobs. The motivation for doing so would have been a master-slave algorithm is useful in cases where the processors require minimal communication with each other, such as during matrix-vector multiplication operations (page 35, first paragraph under section 3.6 heading) or during image processing (column 4, lines 22-28 of Jacobs). Therefore, it would have been obvious to combine Gropp with Sugiyama in view of Jacobs to obtain the invention as specified in claims 2 and 58.



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9. Claims 3, 6-10, 12, 21, 26-27, 29, and 59-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Jacobs (US Patent 5,386,510) and Korman (US Patent 6,308,887 B1).

**Regarding claim 3:** Sugiyama in view of Jacobs does not disclose expressly that said external media processing system is another multimedia printer coupled via a network to the interface for transferring time-based media.

Korman discloses an external media processing system (figure 1(20) and column 3, lines 49-52 of Korman) which is another multimedia printer (figure 2(190); column 4, lines 49-41; and column 6, lines 10-13 of Korman) coupled via a network (figure 1(30) and column 3, lines 49-52 of Korman) to an interface (figure 1(10) of Korman) for transferring time-based media (column 5, lines 30-38 of Korman).

Sugiyama in view of Jacobs is combinable with Korman because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to embody the external media processing system as another multimedia printer, as taught by Korman. The motivation for doing so would have been to provide further support for multimedia printers at more than one location (column 2, lines 30-34 of Korman). Therefore, it would have been obvious to combine Korman with Sugiyama in view of Jacobs to obtain the invention as specified in claim 3.

**Regarding claims 6 and 59:** Sugiyama in view of Jacobs does not disclose expressly that said user interface displays a request for user input from the external media processing system.

Korman discloses a user interface (figure 2(100) of Korman) that displays a request for user input from an external media processing system (column 4, lines 51-57 of Korman).

Sugiyama in view of Jacobs is combinable with Korman because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the display taught by Korman as part of the user interface taught by Sugiyama. The motivation for doing so would have been to be able to display messages and menus, thus providing needed information to the user with regards to the operation of the overall system (column 4, lines 56-59 of Korman). Therefore, it would have been obvious to combine Korman with Sugiyama in view of Jacobs to obtain the invention as specified in claims 6 and 59.

Further regarding claim 59: Sugiyama discloses that said user interface is embedded on the multimedia printer (column 3, lines 41-44 of Sugiyama).

**Regarding claims 7 and 60:** Sugiyama in view of Jacobs does not disclose expressly that said user interface displays the processing status of a task being processed by the external media processing system.

Korman discloses a user interface (figure 2(100) and column 4, lines 51-57 of Korman) that displays the processing status of a task being processed by an external media processing system (column 4, lines 12-13 and column 10, lines 53-58 of Korman).

Sugiyama in view of Jacobs is combinable with Korman because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to display on said user interface the processing status of a task being processed by an external media processing system, as taught by Korman. The motivation for doing so would have been to aid user interaction when processing is occurring in real-time (column 4, lines 8-14 of Korman). Therefore, it would have been obvious to combine Korman with Sugiyama in view of Jacobs to obtain the invention as specified in claims 7 and 60.

**Regarding claims 8-9 and 61:** Sugiyama in view of Jacobs does not disclose expressly that said user interface is part of the external media processing system and displays a request for user input from the printer.

Korman discloses a user interface (figure 2(100) of Korman) that displays a request for user input (column 4, lines 51-57 of Korman). As can clearly be seen in figure 2 of Korman, the user interface (figure 2(100) of Korman) is external from the multi-media printer (figure 2(190) of Korman).

Sugiyama in view of Jacobs is combinable with Korman because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to display a request for user input on a user interface that is external to the multi-media printer, as taught by Korman. Since the system taught by Sugiyama in view of Jacobs contains two processing systems, namely a multi-media printer and an external processing system, then said user

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interface would be a part of said external media processing system since said user interface is external to said multi-media printer. Since the multi-media printer and the external system communicate with each other (figure 1 and column 3, lines 3-8 of Jacobs), and the user interface receives and displays requests for user input from a plurality of different devices (figure 2 and column 4, lines 51-57 of Korman), then the user interface receives and displays requests for user input from the printer. The motivation for doing so would have been to aid user interaction when processing is occurring in real-time (column 4, lines 8-14 of Korman). Therefore, it would have been obvious to combine Korman with Sugiyama in view of Jacobs to obtain the invention as specified in claims 8-9 and 61.

**Regarding claims 10 and 62:** Sugiyama in view of Jacobs does not disclose expressly that the user interface displays the processing status of a task being processed by a printer.

Korman discloses a user interface (figure 2(100) and column 4, lines 51-57 of Korman) that displays the processing status of a task being processed by a device connected to the network (column 4, lines 12-13 and column 10, lines 53-58 of Korman).

Sugiyama in view of Jacobs is combinable with Korman because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to display on said user interface the processing status of a task being processed by a connected device, as taught by Korman, wherein said connected device is the printer taught by Sugiyama. The motivation for doing so would have been to aid user interaction when processing is occurring in real-time (column 4, lines 8-14 of Korman).

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Therefore, it would have been obvious to combine Korman with Sugiyama in view of Jacobs to obtain the invention as specified in claims 10 and 62.

**Regarding claim 12:** Sugiyama in view of Jacobs does not disclose expressly that said interface comprises a removable media storage reader.

Korman discloses outputting digital multimedia data to a removable media storage reader (column 7, lines 31-35 and column 10, lines 28-31 of Korman).

Sugiyama in view of Jacobs is combinable with Korman because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a removable media storage device as part of said interface. The motivation for doing so would have been to provide a convenient, transportable computer medium for the digital data (column 7, lines 33-35 of Korman). Therefore, it would have been obvious to combine Korman with Sugiyama in view of Jacobs to obtain the invention as specified in claim 12.

**Regarding claim 21:** Sugiyama in view of Jacobs does not disclose expressly that said electronic output system is configured to write said electronic representation to a removable media storage device.

Korman discloses outputting digital multimedia data to a removable media storage device (column 7, lines 31-35 and column 10, lines 28-31 of Korman).

Sugiyama in view of Jacobs is combinable with Korman because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary

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skill in the art to write said electronic representation to the removable media storage device taught by Korman. The motivation for doing so would have been to provide a convenient, transportable computer medium for the digital data comprising said electronic representation (column 7, lines 33-35 of Korman). Therefore, it would have been obvious to combine Korman with Sugiyama in view of Jacobs to obtain the invention as specified in claim 21.

**Regarding claim 26:** Sugiyama in view of Jacobs does not disclose expressly that said electronic output system is coupled to a speaker system and sends an audio signal to the speaker system.

Korman discloses outputting audio data using a speaker system as a peripheral device (figure 2(310) and column 7, lines 47-54 of Korman). In order for said speaker system to operate as an output, sending an audio signal to said speaker system is inherent.

Sugiyama in view of Jacobs is combinable with Korman because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to output audio data to a connected speaker system, as taught by Korman. The motivation for doing so would have been to provide the appropriate output format if audio output is desired. Therefore, it would have been obvious to combine Korman with Sugiyama in view of Jacobs to obtain the invention as specified in claim 26.

**Further regarding claim 27:** Korman discloses that said electronic output system comprises an embedded sound player for generating the audio signal (column 5, lines 30-34 of Korman).

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**Regarding claim 29:** Sugiyama in view of Jacobs does not disclose expressly that said media processing system comprises an embedded multimedia server.

Korman discloses an embedded multimedia server (figure 2 (10) and column 3, lines 48-56 of Korman).

Sugiyama in view of Jacobs is combinable with Korman because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a multi-media server in the overall media processing system, as taught by Korman. The motivation for doing so would have been to provide control and communication relay for the multi-media processing devices comprising the media processing system (column 3, lines 49-52 of Korman). Therefore, it would have been obvious to combine Korman with Sugiyama in view of Jacobs to obtain the invention as specified in claim 29.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Jacobs (US Patent 5,386,510), Hymel (US Patent Application Publication 2003/0220988 A1) and Kleinrock (US Patent 5,936,542).

**Regarding claim 13:** Sugiyama in view of Jacobs does not disclose expressly that said media input device is selected from a group consisting of a DVD reader, a video cassette tape reader, a CD reader, an audio cassette tape reader, and a flash card reader.

Hymel discloses a media input device selected from among a DVD reader (para. 10, lines 14-15 and lines 20-21 of Hymel), a

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video cassette tape reader (digital camcorder, which, as is well-known in the art, uses a digital video (DV) cassette tape) (para. 10, lines 14-15 and line 20 of Hymel), a CD reader (para. 10, lines 14-15 and lines 19-20 of Hymel), and an audio cassette tape reader (audio cassette tape reader is a type of audio player, MP3 player is merely an example) (para. 10, lines 14-15 and line 19 of Hymel).

Sugiyama in view of Jacobs is combinable with Hymel because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have available for selection a DVD reader, a video cassette tape reader, a CD reader, and an audio cassette tape reader. The motivation for doing so would have been to allow a user to connect a variety of different types of peripheral devices to an overall system, thus allowing the user to perform a variety of functions (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Jacobs.

Sugiyama in view of Jacobs and Hymel does not disclose expressly that the group consists not only of a DVD reader, a video cassette tape reader, a CD reader, and an audio cassette tape reader, but also a flash card reader.

Kleinrock discloses storing digital data on a flash card, and thus using a flash card reader (column 7, lines 34-35 of Kleinrock).

Sugiyama in view of Jacobs and Hymel is combinable with Kleinrock because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of



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ordinary skill in the art to have available for selection a flash card reader. The suggestion for doing so would have been that a flash card reader is simply another of many possible drives from which to choose (column 7, lines 34-36 of Kleinrock). Therefore, it would have been obvious to combine Kleinrock with Sugiyama in view of Jacobs and Hymel to obtain the invention as specified in claim 13.

11. Claims 14 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Jacobs (US Patent 5,386,510) and Stevens (US Patent Application Publication 2002/0010641 A1).

**Regarding claim 14:** Sugiyama in view of Jacobs does not disclose expressly that the interface comprises a media broadcast receiver that can be tuned to a media broadcast.

Stevens discloses a media broadcast receiver that can be tuned to a media broadcast (figure 3 (110) and para. 36, lines 1-8 of Stevens).

Sugiyama in view of Jacobs is combinable with Stevens because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the multimedia broadcast receiver taught by Stevens in the interface, thus allowing for reception of an external media broadcaster. The motivation for doing so would have been to allow users to retrieve desired distributions of audio and video data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with Sugiyama in view of Jacobs to obtain the invention as specified in claim 14.

**Regarding claims 30 and 31:** Sugiyama in view of Jacobs does not disclose expressly that said multimedia processing system comprises an embedded audio encryption module and an embedded video encryption module.

Stevens discloses an embedded audio encryption module (para. 54, lines 1-4 and para. 57, lines 3-4 of Stevens) and an embedded video encryption module (para. 54, lines 1-4 of Stevens).

Sugiyama in view of Jacobs is combinable with Stevens because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the embedded audio encryption module and the embedded video encryption module taught by Stevens as part of said multimedia processing system. The motivation for doing so would have been to allow users to retrieve desired distributions of audio and video data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with Sugiyama in view of Jacobs to obtain the invention as specified in claims 30 and 31.

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Jacobs (US Patent 5,386,510), Stevens (US Patent Application Publication 2002/0010641 A1), Hymel (US Patent Application Publication 2003/0220988 A1), and McCarthy (US Patent 6,296,693 B1).

**Regarding claim 15:** Sugiyama in view of Jacobs does not disclose expressly that the interface comprises an embedded

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receiver selected from a group consisting of an embedded TV receiver, an embedded radio receiver, an embedded short-wave radio receiver, an embedded satellite radio receiver, an embedded two-way radio, and an embedded cellular phone.

Stevens discloses an embedded TV receiver (figure 3(110) and para. 36, lines 1-8 of Stevens), an embedded radio receiver (para. 36, lines 1-8 of Stevens), and an embedded satellite radio receiver (para. 36, lines 1-8 of Stevens) available for selection by a user (para. 36, lines 6-10 of Stevens).

Sugiyama in view of Jacobs is combinable with Stevens because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have an embedded TV receiver, an embedded radio receiver, and an embedded satellite radio receiver available for selection, as taught by Stevens. The motivation for doing so would have been to allow users to retrieve desired distributions of audio and video data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with Sugiyama in view of Jacobs.

Sugiyama in view of Jacobs and Stevens does not disclose expressly that said group consists of not only an embedded TV receiver, an embedded radio receiver, and an embedded satellite radio receiver, but also an embedded short-wave radio receiver, an embedded two-way radio, and an embedded cellular phone.

Hymel discloses a cellular phone as an input device (para. 10, lines 14-15 of Hymel).

Sugiyama in view of Jacobs and Stevens is combinable with Hymel because they are from similar problem solving areas,

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namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the cellular phone taught by Hymel embedded and selectable, as taught by Stevens. The motivation for doing so would have been to allow a user to connect a variety of different types of peripheral devices to an overall system, thus allowing the user to perform a variety of functions (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Jacobs and Stevens.

Sugiyama in view of Jacobs, Stevens and Hymel does not disclose expressly that said group consists of not only an embedded TV receiver, an embedded radio receiver, an embedded satellite radio receiver, and an embedded cellular phone, but also an embedded short-wave radio receiver, and an embedded two-way radio.

McCarthy discloses including a two-way (CB) radio (column 7, lines 13-16 and lines 21-23 of McCarthy) and a radio receiver for receiving short wave radio signals (column 7, lines 13-16 and lines 21-23 of McCarthy).

Sugiyama in view of Jacobs, Stevens and Hymel is combinable with McCarthy because they are from similar problem solving areas, namely the control of data communication hardware. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the two-way radio and the short-wave radio taught by McCarthy in the group of selectable embedded receivers. The motivation for doing so would have been to provide the user with means of personal communication. Therefore, it would have been obvious to combine

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McCarthy with Sugiyama in view of Jacobs, Stevens and Hymel to obtain the invention as specified in claim 15.

13. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Jacobs (US Patent 5,386,510), Federspiel (US Patent 5,170,935), Baron (US Patent 5,940,776), and McCarthy (US Patent 6,296,693 B1).

**Regarding claim 16:** Sugiyama in view of Jacobs does not disclose expressly that the interface comprises an embedded receiver selected from a group consisting of an embedded heat sensor, an embedded humidity sensor, an embedded National Weather Service radio alert receiver, and an embedded TV Emergency Alert System (EAS) alert monitor.

Federspiel discloses selecting between an embedded heat sensor (column 12, lines 10-18 of Federspiel) and an embedded humidity sensor (column 12, lines 21-24 of Federspiel).

Sugiyama in view of Jacobs is combinable with Federspiel because they are from similar problem solving areas, namely the control and processing of digital time-based data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to select from among an embedded heat sensor and an embedded humidity sensor, as taught by Federspiel. The motivation for doing so would have been to be able to control the environmental conditions in which a user is present (column 2, lines 5-9 of Federspiel). Therefore, it would have been obvious to combine Federspiel with Sugiyama in view of Jacobs.

Sugiyama in view of Jacobs and Federspiel does not disclose expressly that said group consists not only of an embedded heat

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sensor and an embedded humidity sensor, but also of an embedded National Weather Service radio alert receiver, and an embedded TV Emergency Alert System (EAS) alert monitor.

Baron discloses an embedded National Weather Service radio alert receiver (column 5, lines 45-49 and lines 61-65 of Baron).

Sugiyama in view of Jacobs and Federspiel is combinable with Baron because they are from similar problem solving areas, namely the control and processing of digital time-based data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the embedded National Weather Service radio alert receiver taught by Baron in the group of receivers from which a user can select. The motivation for doing so would have been so that a user can stay informed about the latest weather conditions and possible weather emergencies (column 1, lines 23-31 of Baron). Therefore, it would have been obvious to combine Baron with Sugiyama in view of Jacobs and Federspiel.

Sugiyama in view of Jacobs, Federspiel and Baron does not disclose expressly that said group consists not only of an embedded heat sensor, an embedded humidity sensor, and an embedded National Weather Service radio alert receiver, but also of an embedded TV Emergency Alert System (EAS) alert monitor.

McCarthy discloses an embedded TV Emergency Alert System (EAS) alert monitor (column 7, lines 13-16 and lines 18-21 of McCarthy).

Sugiyama in view of Jacobs, Federspiel and Baron is combinable with McCarthy because they are from similar problem solving areas, namely the control and processing of digital time-based data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include

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the embedded TV Emergency Alert System (EAS) alert monitor taught by McCarthy in the group of receivers from which a user can select. The motivation for doing so would have been to keep the user alerted to any emergency conditions (column 7, lines 15-18 of McCarthy). Therefore, it would have been obvious to combine McCarthy with Sugiyama in view of Jacobs, Federspiel and Baron to obtain the invention as specified in claim 16.

14. Claims 18 and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Jacobs (US Patent 5,386,510) and Chino (US Patent 6,118,888).

**Regarding claim 18:** Sugiyama in view of Jacobs does not disclose expressly that the interface comprises an ultrasonic pen capture device.

Chino discloses an ultrasonic pen capture device (figure 3 (102i) and column 7, lines 14-16 of Chino).

Sugiyama in view of Jacobs is combinable with Chino because they are from the same field of endeavor, namely the control and processing of digital data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to capture input data using an ultrasonic pen capture device, as taught by Chino. The suggestion for doing so would have been that an electronic pen is simply another useful output device that provides digital data a user may wish to obtain (figure 3 and column 6, lines 66-67 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Jacobs to obtain the invention as specified in claim 18.

**Regarding claim 32:** Sugiyama in view of Jacobs does not disclose expressly that said multimedia processing system comprises an embedded audio sound localization module.

Chino discloses an embedded audio sound localization module (column 13, lines 5-14 of Chino). By using the gaze object detection portion of the multi-modal interface apparatus, the audio sound localization is determined.

Sugiyama in view of Jacobs is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the embedded audio sound localization module taught by Chino as part of the overall multimedia processing system. The motivation for doing so would have been to ensure that user input is intended, and the user is not speaking to someone else (column 1, lines 52-58 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Jacobs to obtain the invention as specified in claim 32.

**Regarding claim 33:** Sugiyama in view of Jacobs does not disclose expressly that said multimedia processing system comprises an embedded control motion detection module.

Chino discloses an embedded motion detection module (figure 3(102f) and column 7, lines 33-38 of Chino).

Sugiyama in view of Jacobs is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the embedded motion detection module taught by Chino as part of the overall multimedia processing system. The suggestion for doing so would have been that detection of a user's motion and gestures is simply another useful electronic means to input data into a computerized system



(figure 3 and column 7, lines 2-11 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Jacobs to obtain the invention as specified in claim 33.

15. Claims 20 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Jacobs (US Patent 5,386,510) and Hymel (US Patent Application Publication 2003/0220988 A1).

**Regarding claim 20:** Sugiyama in view of Jacobs does not disclose expressly that the interface comprises an embedded audio recorder, wherein the time-based media is a series of sounds that are converted into an electrical format by the embedded audio recorder and then provided to the media processing system.

Hymel discloses an embedded (para. 10, lines 22-26 of Hymel) audio recorder (para. 10, lines 14-15 and line 19 of Hymel). As is abundantly well-known in the art, an embedded audio recorder input into a computerized media processing system inputs, as time-based media, a series of sounds that are converted into an electrical format by the embedded audio recorder and then provided to the media processing system.

Sugiyama in view of Jacobs is combinable with Hymel because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include an embedded audio recorder as part of the interface. The motivation for doing so would have been to allow a user to connect another one of a variety of different types of peripheral devices, thus allowing the user to perform one more of a variety of functions (para. 2, lines 1-6 of

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Hymel). Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Jacobs to obtain the invention as specified in claim 20.

**Regarding claim 28:** Sugiyama in view of Jacobs does not disclose expressly that the electronic output system comprises an embedded web page display.

Hymel discloses an embedded web page display (figure 1(130) and para. 11, lines 1-10 of Hymel).

Sugiyama in view of Jacobs is combinable with Hymel because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include an embedded web page display as part of said electronic output system. The motivation for doing so would have been to allow a user to display a web page, which is simply one of a plurality of different types of desirable output (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Jacobs to obtain the invention as specified in claim 28.

16. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Jacobs (US Patent 5,386,510), Korman (US Patent 6,308,887 B1), Hymel (US Patent Application Publication 2003/0220988 A1), Kleinrock (US Patent 5,936,542), and Gerber (US Patent 5,568,406).

**Regarding claim 22:** Sugiyama in view of Jacobs and Korman does not disclose expressly that said removable storage device is selected from a group consisting of a DVD, a video cassette

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tape, a CD, an audio cassette tape, a flash card, a computer disk, an SD disk, and a computer-readable medium.

Hymel discloses a removable storage device selected from among a DVD (para. 10, lines 14-15 and lines 20-21 of Hymel), a video cassette tape (digital camcorder, which, as is well-known in the art, uses a digital video (DV) cassette tape) (para. 10, lines 14-15 and line 20 of Hymel), a CD (para. 10, lines 14-15 and lines 19-20 of Hymel), and an audio cassette tape (audio cassette tape reader is a type of audio player, MP3 player is merely an example) (para. 10, lines 14-15 and line 19 of Hymel), a computer disk (para. 19, lines 8-9 of Hymel), and a computer-readable medium (para. 19, lines 8-9 of Hymel).

Sugiyama in view of Jacobs and Korman is combinable with Hymel because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have available for selection a DVD, a video cassette tape, a CD, an audio cassette tape, a computer disk, and a computer-readable medium. The motivation for doing so would have been to allow a user to connect a variety of different types of peripheral devices to an overall system, thus allowing the user to perform a variety of functions (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Jacobs and Korman.

Sugiyama in view of Jacobs, Korman and Hymel does not disclose expressly that the group consists not only of a DVD, a video cassette tape, a CD, an audio cassette tape, a computer disk, and a computer-readable medium, but also a flash card and an SD disk.

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Kleinrock discloses storing digital data on a flash card (column 7, lines 34-35 of Kleinrock).

Sugiyama in view of Jacobs, Korman and Hymel is combinable with Kleinrock because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have available for selection a flash card. The suggestion for doing so would have been that a flash card is simply another of many possible storage devices from which to choose (column 7, lines 34-36 of Kleinrock). Therefore, it would have been obvious to combine Kleinrock with Sugiyama in view of Jacobs, Korman and Hymel.

Sugiyama in view of Jacobs, Korman, Hymel and Kleinrock does not disclose expressly that the group consists not only of a DVD, a video cassette tape, a CD, an audio cassette tape, a computer disk, a computer-readable medium, and a flash card, but also an SD disk.

Gerber discloses storing digital data on an SD disk (column 10, lines 28-34 of Gerber).

Sugiyama in view of Jacobs, Korman, Hymel and Kleinrock is combinable with Gerber because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have available for selection an SD disk. The motivation for doing so would have been that an SD disk is useful for backing up large amounts of digital data (column 10, lines 23-34 of Gerber). Therefore, it would have been obvious to combine Gerber with Sugiyama in view of Jacobs, Korman, Hymel and Kleinrock to obtain the invention as specified in claim 22.

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17. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Jacobs (US Patent 5,386,510) and Kimura (US Patent 5,270,989).

**Regarding claim 23:** Sugiyama in view of Jacobs does not disclose expressly that said electronic output system comprises a handling mechanism to accommodate a plurality of removable storage devices.

Kimura discloses a handling mechanism (figure 1(6) of Kimura) that accommodates a plurality of removable storage devices (column 4, lines 46-52 of Kimura).

Sugiyama in view of Jacobs is combinable with Kimura because they are from similar problem solving areas, namely processing and storing digital output data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide a handling mechanism to handle a plurality of removable storage devices, as taught by Kimura. The motivation for doing so would have been to be able to store and select from among a plurality of different available removable storage devices (column 2, lines 38-42 of Kimura). Therefore, it would have been obvious to combine Kimura with Sugiyama in view of Jacobs to obtain the invention as specified in claim 23.

18. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Jacobs (US Patent 5,386,510), Kimura (US Patent 5,270,989), Takemasa (US Patent 5,136,563), and Morinaga (US Patent 4,734,898).

**Regarding claim 24:** The arguments regarding claim 23 are incorporated herein. Kimura further discloses selecting between

handling devices (such as Laser Disc or CD) (column 5, lines 23-30 of Kimura). Both handling devices are of the tray type (column 5, lines 20-27 of Kimura).

Sugiyama in view of Jacobs and Kimura does not disclose expressly that the group of handling mechanism from which the handling mechanism is selected consists not only of a tray, but also of a feeder and a bandolier.

Takemasa discloses a feeder type handling mechanism (figure 2b; figure 18; and column 5, lines 52-67 of Takemasa).

Sugiyama in view of Jacobs and Kimura is combinable with Takemasa because they are from similar problem solving areas, namely processing and storing digital output data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the feeder type handling mechanism taught by Takemasa as another type of handling mechanism from which to choose. The motivation for doing so would have been to provide for compact and reliable insertion and switching of the removable storage devices (column 2, lines 14-16 of Takemasa). Therefore, it would have been obvious to combine Takemasa with Sugiyama in view of Jacobs and Kimura.

Sugiyama in view of Jacobs, Kimura and Takemasa does not disclose expressly that said group of handling mechanism from which the handling mechanism is selected consists not only of a feeder and a tray, but also of a bandolier.

Morinaga discloses a bandolier type handling mechanism (figure 3a and column 4, lines 53-62 of Morinaga).

Sugiyama in view of Jacobs, Kimura and Takemasa is combinable with Morinaga because they are from similar problem solving areas, namely processing and storing digital output data. At the time of the invention, it would have been obvious

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to a person of ordinary skill in the art to include the bandolier type handling mechanism taught by Morinaga as another type of handling mechanism from which to choose. The motivation for doing so would have been to be able to store even more removable storage devices that with the tray or feeder type handling mechanisms while preventing damage to the removable storage devices (column 2, lines 14-24 of Morinaga). Therefore, it would have been obvious to combine Morinaga with Sugiyama in view of Jacobs, Kimura and Takemasa to obtain the invention as specified in claim 24.

19. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Jacobs (US Patent 5,386,510) and Steinberg (US Patent 6,000,030).

**Regarding claim 25:** Sugiyama in view of Jacobs does not disclose expressly that said electronic output system comprises a media writer selected from a group consisting of a disposable media writer and a self-destructing media writer.

Steinberg discloses a disposable media writer (column 4, lines 16-20 of Steinberg) and a self-destructing media writer (column 5, lines 28-36 of Steinberg).

Sugiyama in view of Jacobs is combinable with Steinberg because they are from similar problem solving areas, namely the control and storage of digital data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide for digital data output a group of media writers consisting of a disposable media writer and a self-destructing media writer, as taught by Steinberg. The motivation for doing so would have been prevent unauthorized

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access to computer files (column 1, lines 43-50 of Steinberg). Therefore, it would have been obvious to combine Steinberg with Sugiyama in view of Jacobs to obtain the invention as specified in claim 25.

### **Conclusion**

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the



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organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



09 March 2006

James A. Thompson  
Examiner  
Division 2625



**DAVID MOORE**  
**SUPERVISORY PATENT EXAMINER**  
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